

Safety & Total Health Day is right around the corner

Johnson Space Center’s Seventh Annual Safety & Total Health Day will be Wednesday, Oct. 23. This year’s theme is “Be safe, for the health of it.”

The event will include various speakers, shows and booths to help JSC employees work – and live – safely. One of those scheduled speakers is Center Director Lt. Gen. Jefferson Davis Howell, Jr. While Howell believes JSC has “a wonderful safety record,” he stressed that there is always room for improvement. He called Safety and Total Health Day “a reminder to us, sort of like the booster shot you take from time to time, to make us reflect on what it takes to really be a top-running, safe organization.”

In addition to the activities on Oct. 23, Safety & Total Health Day will be given a kick-start by a few events the week before. Below is a schedule of the activities:

Wednesday, Oct. 16

11:30 a.m., Teague Auditorium. Dr. Robert Conn: “Changing Behavior to Avoid Injuries.” Dr. Conn, a former pediatric heart surgeon, founded the SmartRisk Foundation and now speaks publicly about injury prevention.

7 p.m., Gilruth Center Ballroom: SmartRisk Foundation’s HEROES program. HEROES is an innovative road show designed to encourage young people to take risks, but to do it safely. JSC civil servant and contractor employees are encouraged to bring their families to this event. Entry to the Gilruth Center is through Gate 5.

Thursday, Oct. 17

7 p.m., Gilruth Center Ballroom: SmartRisk Foundation’s HEROES program. (See Oct. 16 listing for details.)

Wednesday, Oct. 23

11:30 a.m.-3:30 p.m., JSC’s mall area: booths providing information on safety, health and the environment.

11:30 a.m., Teague Auditorium: Center Director Jefferson Howell. Opening remarks.

12 p.m., Teague Auditorium: Lt. Col. Graham Buschor, Chief of Safety of the 106th Rescue Wing, New York Air National Guard. Buschor was one of the pilots responsible for a dramatic rescue at sea featured in the novel *The Perfect Storm*. He will recount the event and provide information on boating safety.

1 p.m., Teague Auditorium: Billy Robbins. Robbins lost both of his hands in an accident with a power line, and now uses his experience in his presentations about accident prevention. Robbins uses a humorous yet direct approach when speaking about achieving an accident-free workplace.

2:30 p.m., Teague Auditorium: Daren Brooks, founder and CEO of Health Restoration Systems. Brooks will speak about stress. In addition to maintaining a rehabilitation center for chronically ill patients, Brooks teaches stress management sessions at NASA and at Wyle Laboratories.

3:30 p.m., Gilruth Center: JSC Health Run/Walk. Directorates compete for the George W. S. Abbey Award. If interested, sign up through the Safety and Total Health Day Web site: <http://www4.jsc.nasa.gov/safety/index2.htm>.

Lunar rocks land at White Sands Test Facility

By Cheerie R. Patneau

A portion of NASA’s lunar rocks and soil sample collection from the Apollo Program has been housed in a super-clean, secure vault at Brooks Air Force Base in San Antonio for many years. This was done to provide an alternate storage location in the unlikely event a disaster was to befall the primary collection at Johnson Space Center in Houston.

However, the Air Force base is being deactivated and the samples must be relocated later this year. When selecting a new home for the collection, many factors had to be considered, such as seismic activity, susceptibility to hurricanes or tornadoes and physical security.

In the end, NASA Johnson Space Center’s own White Sands Test Facility (WSTF) near Las Cruces, N.M., was given the honor.

A secure keeping room consisting of a 10-by-12-foot vault and an attached 8-by-16-foot Class 1000 cleanroom were constructed inside an existing building to house and secure this 52-kilogram portion of the full 382-kilogram collection. Slated for storage at the test facility is 4.5 percent of the total NASA samples.

Justin Kerr, Lisa Vidonic and Jack Warren are a few of the NASA JSC personnel working with WSTF engineers to ensure the integrity of these priceless specimens for many generations to come.

Dr. Gary Lofgren, NASA Lunar Curator at JSC, said the WSTF lunar facility “is a joint effort between JSC and the test facility in a collaborative effort to maintain the integrity of the lunar samples.”

The diverse collection at WSTF will never be on display. The rocks and soil samples to be stored there are kept in hermetically sealed, triple-wrapped Teflon bags. These bags are packed into gallon-sized stainless-steel containers with bolted tops, purged with dry nitrogen and stored in a stainless-steel cabinet inside the bank-like, double-locked reinforced concrete and steel vault.

“The stored lunar collection will be secured at the test facility as a precaution against a catastrophe – such as hurricane, theft, vandalism, physical abuse, a chemical reaction due to exposure to Earth’s atmosphere – and to prevent contact with terrestrial matter,” said Richard Von Wolff, who is the NASA WSTF Project Manager for construction of the secured lunar storage facilities.

Even though most of them will never see the collection, all WSTF team members still have something to get excited about.

“A large museum-grade Moon rock will be on temporary display for the test facility personnel, with an accompanying story board,” Von Wolff said.

If JSC needs the samples for experiments or any other reason, Von Wolff said the collection would be shipped back and opened under a glove-box operation to maintain the integrity of the samples. The items are catalogued by Moon landing site and collection point, with a numbering scheme distinguishing soils from rocks.

“Many people may think the rocks and soil samples are a dull Moon-dust color, judging by the color of the Moon itself. However, the lunar samples actually do have some color and many contain crystals,” Von Wolff said.

These samples won’t be the state’s first lunar samples.

“The New Mexico Museum of Space History at Alamogordo currently has a larger lunar rock on public display, courtesy of NASA,” Von Wolff said, “and there is another on public display in the Museum of Natural History at Albuquerque.”

Even after three decades, they continue to captivate

“The lunar collections are still exciting to us 30 years later,” Dr. Gary Lofgren, NASA Lunar Curator at JSC, said.

Today, around the world, between 50 and 60 scientists research the samples. Currently, there are 300 to 400 samples sent out for scientific study each year, Lofgren said.

The results of these studies are presented annually at the Lunar and Planetary Conference in Houston. Of the 12 to 13 scientific sessions each year, typically two or three of them are devoted to the study of lunar samples, he added.

“NASA also asks the National Academy of Science for recommendations on future missions,” Lofgren said. “The academy has recommended that NASA send a mission to the Moon to collect more samples.

“The academy gave this mission a high priority, and this mission would also provide a good opportunity to test techniques for collecting samples on Mars. Perhaps a lunar robotic mission can be a possibility in five to seven years.”

A CLOSER LOOK: THE LUNAR SAMPLES